Amendments to the Drawings

The attached sheets of drawings are replacement sheets to further clarify FIG. 2 - FIG. 5.

REMARKS

I. Status of the Claims

Claims 1-26 were originally filed. Claims 1-5, 7-14 and 16-26 were withdrawn as non-elected subject matter. Claim 6 is presently amended to include fragments of the p153 polypeptide. Support for the claimed fragments can be found at least on page 10, lines 12 to 16 and page 14, lines 9-13. New claims 27-34 are added with support for these claims being found at least on page 16, line 19 to page 17, line 3 and page 14, lines 9-13. Thus, no new matter has been added. Claims 6, 15 and 27-34 are pending.

II. Corrected Drawings Required

Applicants enclose substitute drawings for Figure 2 – Figure 5 to replace originally filed Figure 2 – Figure 5.

III. Amended Claim 15 is Enabled by the Present Specification

The office action rejects claim 15 as failing to comply with the enablement requirement of 35 U.S.C. §112. Applicants have amended claim 15 to read "A composition comprising a p153 polypeptide of claim 6." Support for this amendment may be found at least on page 15 – 16 that reads in part "The invention is directed to isolated polynucleotides encoding *Ehrlichia Canis* immunoreactive surface protein p153..." and "The instant invention also encompasses ... isolated and purified p153 ...." Applicants note that polypeptide compositions are well known to one of skill in the art and may be used for purposes other than protective immunity including, but not limited to the production of antibodies for diagnostic procedures. In light of the current amendment, the rejection of claim 15 is moot.

IV. Pending Claims are Not Anticipated by McBride *et al.*, 2001

The action rejects claim 6 and 15 under 35 U.S.C. §102(b) as being anticipated by McBride *et al.*, 2001. The action contends that the sequence disclosed in McBride *et al.*, 2001 discloses SEQ ID NO:2 of the present invention. Applicants did not receive the STIC sequence search report referenced in the outstanding action. Therefore, applicants cannot specifically address the results of the particular sequence search, but Applicants are confident that the following argument addresses any concerns.

McBride *et al.*, 2001 ("McBride") does not disclose the full length sequence of the p153 protein. McBride (2001) states on page 318 left column that "The complete ORF was 1,170 kb in length encoding a predicted protein of 390 amino acids with a predicted molecular mass of 42.6 kDa (Fig. 1)." In contrast, Applicants state on page 7, lines 1 -5 of the present specification that "...[I]nvestigation revealed that the *E. canis* p43 represents the N-terminal portion of a protein with a predicted molecular mass of 153kD..." Applicants disclose the entire p153 sequence in the present application by reference to Genbank accession AY156950 that was subsequently merged into Genbank AF252298.2 [GI:37528969], see Exhibit 1 and Exhibit 2, attached, representing a 831 amino acid protein not a 390 amino acid protein as reported in McBride (2001).

The sequence reported by McBride in Genbank Accession number AF252298 [GI:12658962] (Exhibit 1, attached) made public on February 5, 2001 was replaced, see comment line in both Exhibit 1 and Exhibit 2, on October 6, 2003 with Genbank Accession number AF252298.2 [GI:37528969] (Exhibit 2, attached). Applicants refer to the submission of AF252298.2 [GI:37528969] as Genbank accession number AY156950 in the specification on page 14, line 13. One of skill in the art would readily recognize the revision of the first version

of AF252298, as evinced by Exhibit 1 and 2, to include the full length nucleic acid sequence and encoded p153 polypeptide. The October 6, 2003 version of the Genbank submission includes the entire coding region of p153. Thus, the amended claim 6 that reads "...[An] isolated DNA which encodes a p153 protein having the amino acid sequence of SEQ ID NO:2 includes additional amino acids relative to the amino acid sequence disclosed in McBride *et al.*, 2001.

The present application has a filing date of November 4, 2003 and claims priority to U.S. Provisional Application 60/423,573 filed November 4, 2002. Thus, the Genbank submission representing the full length p153 was not published more than twelve months before the filing date of the present application and is not available under 35 U.S.C. 102(b) as anticipating prior art.

Also, Applicants rebut the allegation that the pending claims read on the respective bacterial genome. The current claims are directed to an isolated and purified polypeptide not a nucleic acid composition and thus do not include the bacterial genome within the claim scope.

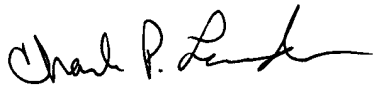
Applicants respectfully request the withdrawal of the rejection.

CONCLUSION

Applicants believe that the foregoing remarks fully respond to all outstanding matters for this application. Applicants respectfully request that the rejections of all claims be withdrawn so they may pass to issuance.

The Examiner is invited to contact the undersigned patent agent at 713-651-5391 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,



Charles P. Landrum, Ph.D.
Reg. No. 46,855
Agent for Applicants

FULBRIGHT & JAWORSKI L.L.P.
600 Congress Avenue, Suite 2400 Austin,
Texas 78701
713-651-5391

Date: September 19, 2005

Attachments: Exhibits 1 and 2